

Amendments to the Claims

1. (*Currently Amended*) A method of reducing inter-symbol interference occurring at the digital to analog conversion of a one-bit digital signal stream, the generation of said one-bit digital signal stream (~~Se~~) ~~comprising the steps of~~ comprising the steps of:

_____ converting an input signal to said one-bit digital signal stream with a sigma-delta configuration (~~SD~~) of a low pass filter (~~F~~) having an output coupled to the input of a quantizer (~~Q~~) whose output is fed back to the input of the low pass filter,

_____ characterized by generating a control signal (~~Se~~) that is representative of the density of the edges of the one-bit digital signal stream at the output (~~θ~~) of the quantizer,

_____ multiplying the control signal (~~Se~~) with said one-bit digital signal stream (~~Se~~) and

_____ applying the result of the multiplication together with the output of the low pass filter (~~F~~) to the input of the quantizer(~~Q~~).

2. (*Currently Amended*) A one-bit sigma-delta converter for converting an input signal (~~SI~~) to a one-bit digital signal stream (~~Se~~), said converter comprising

_____ a quantizer (~~Q~~) with an input and an output,

_____ a low pass filter (~~F~~) whose output is coupled to the input of the quantizer and whose input is coupled to the output of the quantizer, thereby constituting a feedback-arrangement with the quantizer,

_____ means (~~P1~~) to supply the input signal (~~SI~~) to the feedback arrangement and

_____ means (~~θ~~) to derive the one-bit digital signal stream from the output of the quantizer, characterized by an edge-density controller (~~G~~) connected to the output (~~θ~~) of the quantizer for providing a control signal (~~Se~~) indicative of the density of the edges of the one-bit digital signal stream (~~Se~~),

_____ a multiplier (~~M~~) for multiplying said control signal (~~Se~~) with the one-bit digital signal stream (~~Se~~) of the quantizer and

_____ means (~~P2~~) for applying the output of the multiplier to the input of the quantizer.

3. (*Currently Amended*) A one-bit sigma-delta converter as claimed in claim 2 characterized in that the edge-density controller (G) comprises
_____ an edge-extractor (E) connected to receive the one-bit digital signal stream (S₀) of the quantizer, and
_____ a second low pass filter (N) receiving the output signal (S_E) of the edge-extractor and providing said control signal (S_e).

4. (*Currently Amended*) A one-bit sigma-delta converter as claimed in claim 3 characterized by a reference signal source (V_p) connected to the second low pass filter (N) for referencing the level of the control signal (S_e).

5. (*Currently Amended*) A one-bit sigma-delta converter as claimed in claim 3 characterized in that the second low pass filter (N) is an integrator and that the reference signal is applied with a polarity opposite to that of the edge-extractor pulses to the input of the integrator.

6. (*Currently Amended*) A multi-bit sigma-delta converter for converting an input signal (S_I) to a multi-bit digital signal, said converter comprising said converter comprising:
_____ a plurality of interconnected one-bit sigma-delta converters each with a low pass filter (F) in feedback arrangement with one of a plurality (V_Q) of interconnected quantizer means,
_____ means to supply the input signal to said plurality of quantizer means and means to derive the multi-bit digital signal from the outputs (01, 02, 03) of the plurality of quantizer means, characterized in that each of the outputs of the plurality of quantizer means is connected to an edge-density controller (G) for providing a control signal indicative of the edges of the one-bit digital stream at said output,
_____ a multiplier (M) for multiplying said control signal with the one-bit digital stream of said output and
_____ means (P2) for applying the result of the multiplication to the respective input of the quantizer means (V_Q).

7. (*Currently Amended*) A storage medium (~~+~~) having stored thereon at least one signal track in one-bit digital stream format, characterized in that the number of clock periods comprising an edge in the one-bit digital stream of said signal track is less than 40% of the total number of clock periods of the one-bit digital stream of said signal track.